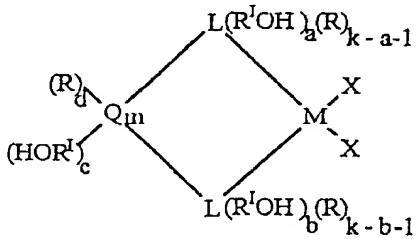
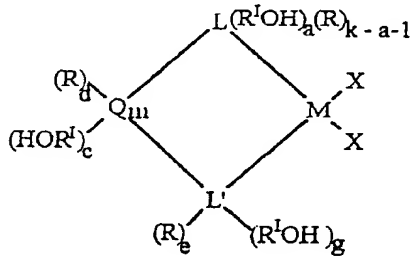
ABSTRACT

Heterogeneous catalytic component obtainable by reacting a porous inorganic support with a metallocene compound characterized in that the metallocene compound is defined by the following general formulas:

$$(LR_k)_z[LR_{k-f}(R^IOH)_f]_xMX_y \qquad I$$



II



III

wherein:

L, equal to or different from each other, is selected from the group comprising: cyclopentadienyl, indenyl, tetrahydroindenyl, fluorenyl, octahydrofluorenyl or benzoindenyl; each **R** is independently selected from hydrogen, C_1-C_{20} alkyl, C_3-C_{20} cycloalkyl, C_6-C_{20} aryl, C_3-C_{20} alkenyl, C_7-C_{20} arylalkyl, C_7-C_{20} alkylaryl, C_8-C_{20} arylalkenyl, linear or branched, optionally substituted by 1 to 10 halogen atoms, or a group SiR^{II}_3; each $\mathbf{R^I}$ equal to or different from each other is a divalent aliphatic or aromatic hydrocarbon group containing from 1 to 20 carbon atoms, optionally containing from 1 to 5 heteroatoms of groups 14 to 16 of the periodic table of the elements and boron; each **Q** is independently selected from B, C, Si, Ge, Sn; **M** is a metal of group 3, 4 or 10 of the Periodic Table, Lanthanide or Actinide; each **X** is independently selected from: hydrogen, chlorine, bromine, OR^{II}, NR^{II}_2, C_1-C_{20} alkyl or C_6-C_{20} aryl ; each $\mathbf{R^{II}}$ is independently selected from C_1-C_{20} alkyl , C_3-C_{20} cycloalkyl, C_6-C_{20} aryl, C_3-C_{20} alkenyl, C_7-C_{20} arylalkyl, C_7-C_{20} arylalkenyl or alkylaryl, linear or branched; R^{II} is methyl, ethyl, isopropyl; **L'** is N or O; when L is cyclopentadienyl k is equal to 5, when L is indenyl k is equal to 7, when L is fluorenyl or benzoindenyl k is equal to 9, when L is tetrahydroindenyl k is equal to 11 and when L is

octahydrofluorenyl, k is equal to 17; **z** is equal to 0, 1 or 2; **x** is equal to 1, 2 or 3; **y** is equal to 1, 2 or 3; **x** + **y** + **z** is equal to the valence of **M**; **m** is an integer which can assume the values 1, 2, 3 or 4; **a** and **b** are integers whose value ranges from 0 to k-1; **f** is an integer whose value ranges from 1 to k; **g** is 0 or 1; **c** and **e** are equal to 0 or 1; **a** + **b** + **c** is at least 1; **a** + **g** + **c** is at least 1; **d** is equal to 0, 1 or 2; when **Q** is B, then **c** + **d** = 1; when Q is C, Si, Ge or Sn, then **c** + **d** = 2; when **L'** is N, then **g** + **e** = 1; when **L'** is O, then **g** = 0 and **e** = 0.

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